

Studies of the urban-rural nature of SIDS have generally yielded conflicting results (1,2,8,9,16-18). However, like Standfest's study of upstate New York (15), Blok's study of North Carolina SIDS (3) revealed no significant difference between urban and rural areas. Based on correlations between county SIDS rates and each of percent rural, percent rural farm and percent rural non-farm, results of this study support findings for no urban-rural difference.

Several studies have shown males to be at higher risk of SIDS than are females (1-3,6,15-18). Present results support these findings with 1974-78 SIDS rates of 2.27 for males and 1.77 for females being significantly different by the chi-square criterion. An even more striking difference is observed between whites and nonwhites with the nonwhite rate being 3 times higher.

Table 2 shows annual and 4-year average SIDS rates for races, sexes and race-sex groups. The highest rate occurs among nonwhite males, the lowest among white females with a risk ratio of more than 4 to 1. The difference between males and females is significant for whites but not nonwhites.

TABLE 2  
NUMBER AND RATE<sup>1</sup> OF INFANT DEATHS WITH MENTION OF  
SUDDEN INFANT DEATH SYNDROME BY YEAR<sup>2</sup> AND BY RACE AND SEX,  
NORTH CAROLINA, 1974-78

Race-Sex Specific Group	1974-75		1975-76		1976-77		1977-78		1974-78	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
White	69	1.19	67	1.24	61	1.08	71	1.26	268	1.19
Nonwhite	91	3.44	95	3.77	103	3.87	110	4.10	399	3.80
Male	93	2.16	85	2.10	101	2.37	104	2.42	383	2.27
Female	67	1.63	77	1.99	63	1.55	77	1.91	284	1.77
White Males	46	1.55	39	1.41	39	1.35	38	1.30	162	1.40
White Females	23	0.82	28	1.07	22	0.80	33	1.21	106	0.97
Nonwhite Males	47	3.52	46	3.62	62	4.57	66	4.80	221	4.14
Nonwhite Females	44	3.36	49	3.93	41	3.14	44	3.37	178	3.44
Total	160	1.90	162	2.05	164	1.97	181	2.17	667	2.02

<sup>1</sup>Deaths per 1,000 live births.

<sup>2</sup>Defined as July 1 - June 30.

The percent distribution of SIDS deaths reveals that over 80% occurred during the first 4 months of life, nearly 90% during the first five months. Most (62%) occurred between the first and third months.

The figure on the following page shows the distribution of SIDS by month from July 1974 through June 1978. The winter excess (January-March) is consistent with findings of other studies (1,5,6,9,12,15-18).

### Space-Time Clustering

It has been shown that SIDS deaths are more common in certain contiguous N.C. counties and occur more frequently in winter. To determine statistically whether SIDS do cluster in time and space, the Ederer-Myers-Mantel procedure (10) was applied to the 4 years of N.C. data. Spatial units were 4-year county units, 4-year Health